

## Regional authorities

This section is targeted to governmental organizations that work at the regional or metropolitan level. Many transportation organizations, including the Regional Transportation Authority (RTA) and the transit service boards including the Chicago Transit Authority (CTA), Metra, and Pace fit within this category. CMAP, as the region's metropolitan planning organization (MPO), also plays a major role in transportation planning and programming. It should be noted that other major transportation agencies such as the Illinois Department of Transportation (IDOT) and Illinois Tollway are described in the state section of this chapter. Other nongovernmental groups that do work at the regional level, like civic organizations, philanthropic groups, or coalitions are described in the nongovernmental organizations section.

## How Regional Decisions Affect Plan Implementation

A central purpose of GO TO 2040 is to explore the appropriate role of regional agencies in addressing our future economy and livability. While the region is the geographic level at which the economy functions, there is limited public sector decision-making at this level.

An exception involves transportation investment; the region's transit agencies are stand-alone units of government that operate across jurisdictions. The CMAP Board and the MPO Policy Committee, both of which are staffed by CMAP and operate under a memorandum of understanding, have responsibility for regional transportation planning and programming. The CMAP Board and MPO Policy Committee track the use of local, state, and federal transportation funds and retain the ability to judge whether or not the allocation of federal and state monies align with regional priorities.

CMAP is the only metropolitan-scaled public sector agency in the region which is involved in issues beyond transportation. Historically, CMAP's role has included regional coordination, technical assistance to other units of government, and data collection, dissemination, and analysis. Shared priorities can be developed among other units of government through these efforts. In many areas — creating a network of green infrastructure, or supporting the region's economic specializations — CMAP can play an important role in coordinating among other units of government, nonprofit organizations, and the private sector. In the case of these examples, CMAP can lead projects and advance their implementation even without specific implementation authority.

There are also opportunities for regional agencies such as CMAP to take a broader role. This includes coordinating and leading local applications for federal or state funding in the areas of housing, energy efficiency, or others.

This section of the plan describes actions that can be undertaken at the regional level that would help to implement the plan, both by CMAP and by the transit agencies. It includes several case studies and best practices, and discusses the relationship of regional organizations to those that operate at the other levels of geography.



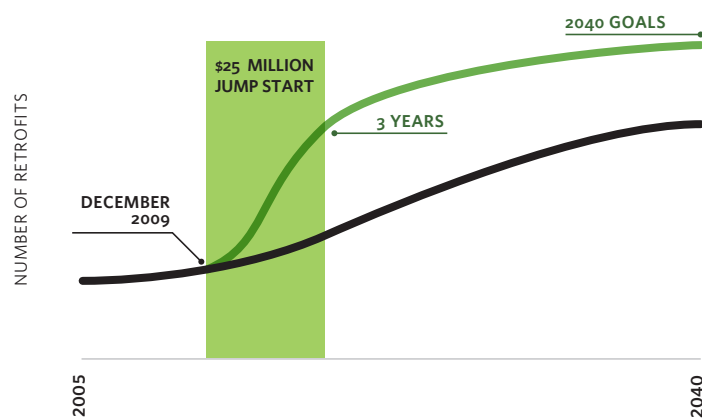
The link between transit, land use, and housing is a particularly important one for regional agencies to address. Local land use and infrastructure investments make a difference in the success of regional transit services. Regional agencies can identify opportunities for the application of transit oriented development (TOD), provide guidelines for how to plan to support transit, and consider supportive local actions when planning service changes. To support its transportation programming and project selection responsibilities, CMAP can continue to develop the analytical tools which evaluate these linkages, and the CMAP Board and MPO Policy Committee can use comprehensive evaluation criteria to measure the performance of potential projects to support better regional decision-making.

## Resource Conservation

GO TO 2040 identifies a role for CMAP in providing technical assistance and research, as well as some direct implementation in the areas of energy and water conservation. CMAP can create model ordinances for energy or water efficiency, offer assistance to communities in the application of full-cost pricing or other complex water conservation strategies, or offer other technical assistance and research support. The *Water 2050* regional plan provides additional specific recommendations for action.

Expansions in the traditional role of regional agencies can also be appropriate in many circumstances, particularly in new or emerging fields, or in response to state or federal opportunities. CMAP's work on the Regional Retrofit Ramp-up program, which involved a partnership with a number of local governments to receive federal funds to create a network supporting energy-efficiency retrofits, involves a direct implementation role for the agency.

### Chicago Region Retrofit Ramp-up (CR3) accelerating the marketplace to value energy efficient buildings



In April 2010, CMAP was awarded \$25 million through the U.S. Department of Energy's (DOE) "Retrofit Ramp-up" Initiative for a collaboration with the City of Chicago, suburban counties and municipalities, the City of Rockford, and other stakeholders. This three-year grant will help create a sustainable market for building retrofits that will decrease participating property owners' energy bills by an average of 30 percent, while helping to reduce the region's energy footprint. CMAP anticipates that the grant will leverage an additional \$500 million in local investments, creating over 2,000 jobs and retrofitting 9,500 buildings in the region.

From CMAP Library

Source: Chicago Metropolitan Agency for Planning

## Open Space

GO TO 2040 addresses open space at a variety of levels — conservation open space such as forest preserves, local open space such as parks, and connections between open space of all types. Regional agencies, namely CMAP, can play a role in setting regional priorities, helping to further protection of high-priority areas (though not by actually acquiring property itself), and specifically looking at environmental features that cross jurisdictional boundaries such as waterways.

The Green Infrastructure Vision (GIV) is an important initial step to set regional priorities for acquisition and ecosystem restoration. CMAP can work with land management organizations and other environmental groups to further refine the GIV, and then use the resulting product to guide investment decisions. Further refinement of the GIV would advance its implementation by making its recommendations more specific.

Beyond further refinement and prioritization, CMAP can take other actions to implement the GIV. It can use the refined GIV to inform its recommendations concerning sewer service expansions, and can ensure that transportation agencies are sensitive to high-priority protection and restoration areas as they pursue transportation projects. Also, collecting and publicizing regional data on open space preservation and the conditions of ecosystems would help to increase awareness and encourage good stewardship of valuable open space.

Regional agencies are also well-suited to address environmental features that cross jurisdictions, such as waterways. These can be addressed within the region by coordinating between counties, local governments, and other regulatory agencies on waterway use and protection, and also by coordinating beyond the boundaries of the region with other agencies in Wisconsin, Indiana, and elsewhere in Illinois. Much of the GIV is based around linear connections along waterways, so this approach would also help with its implementation.

## Local Food

GO TO 2040 recommends a supportive role for CMAP in promoting sustainable local food, primarily involving convening food groups at the regional level, conducting research and analysis, and improving data availability to measure local food issues. Technical assistance to local governments seeking to include local food as part of their comprehensive plans or ordinances is also a relevant regional role.

### Green Infrastructure Vision, Northeastern Illinois



The GIV was developed by Chicago Wilderness in partnership with a wide variety of other groups. It provides a regional-scale vision of important areas for protection or restoration across the region and beyond into neighboring states. Image courtesy of Chicago Wilderness

# Human Capital

As a regional agency, CMAP can also play a role in addressing GO TO 2040's recommendations regarding human capital, including education and workforce development and economic innovation. CMAP's primary role includes research, data analysis and dissemination, and convening stakeholders who are active in this area.

## Education and Workforce Development

GO TO 2040 directs most of its recommendations to organizations specializing in these fields, with a limited role for regional agencies like CMAP. An appropriate CMAP role involves collecting and providing improved data systems to better inform workforce, education, and economic development activities, and to help overcome the gaps in communication between these systems.

## Economic Innovation

GO TO 2040 identifies actions that can be taken by the public sector to support innovation, which is an important contributor to our region's economy. CMAP can continue to research and study regional "industry clusters," or concentrations of interrelated firms. The region can organize economic development activities (such as workforce development) around these specializations. An emerging area of particular interest is the green economy, an economic sector of growing importance.

An important role for CMAP in supporting innovation is collecting and tracking related data. Innovation is notoriously difficult to measure; so is the green economy. An appropriate regional role involves collection, analysis, and dissemination of data, and this is underway through the Regional Indicators Project. Regional groups are also well-placed to organize coalitions among economic developers, universities and researchers, business organizations, and other groups to help obtain state and federal funding for initiatives related to innovation.



## Efficient Governance

GO TO 2040 emphasizes the governance of our region, including tax policy, access to information, and coordinated investment. As one of the few governmental agencies operating at the regional level, CMAP is directly involved in supporting or implementing many of these recommendations.

### Tax Policy

GO TO 2040 recommends the formation of a task force on taxation and fiscal issues, staffed by CMAP and reporting to the CMAP Board. This group will address issues of state disbursements of sales tax revenue, sales tax and the service sector, property tax classification and limitations, and local tax capacity equity issues, with the intention of making recommendations for action to the state.

### Access to Information

The launch of the Regional Indicators Project, a joint initiative between CMAP and the Chicago Community Trust, will be used to track the region's progress in implementing GO TO 2040. This project includes the collection, standardization, and dissemination of data across a wide variety of subject areas, and an interactive website, MetroPulse, which is expected to be continually improved after its launch. GO TO 2040 emphasizes the importance of not just maintaining and improving the indicators website, but also to actively work with other organizations that could contribute data (local, county, and state governments, transportation agencies, and many others) to create standardized data sharing processes.

### Coordinated Investments

GO TO 2040 includes a number of direct recommendations for a more regional approach in planning and investment decisions. These recommendations highlight the importance of a regional role in fostering intergovernmental collaboration, as well as organizing the region's response to available federal or state funding opportunities or through seeking a greater programming role for appropriate funds. GO TO 2040 recommends that CMAP serve as a regional leader for increasing the efficiency and effectiveness of federal, state and other public investments, including funding expected to be allocated through the federal interagency Partnership for Sustainable Communities. Regional agencies — not just CMAP, but the regional transit agencies as well — should also ensure that their current programmatic decisions support GO TO 2040.



The Regional Transportation Asset Management System (RTAMS), administered by the RTA, provides a variety of data concerning the region's transportation systems, including utilization statistics, financial records, and information about ongoing planning or capital investment projects. Image courtesy of RTAMS

# Regional Mobility

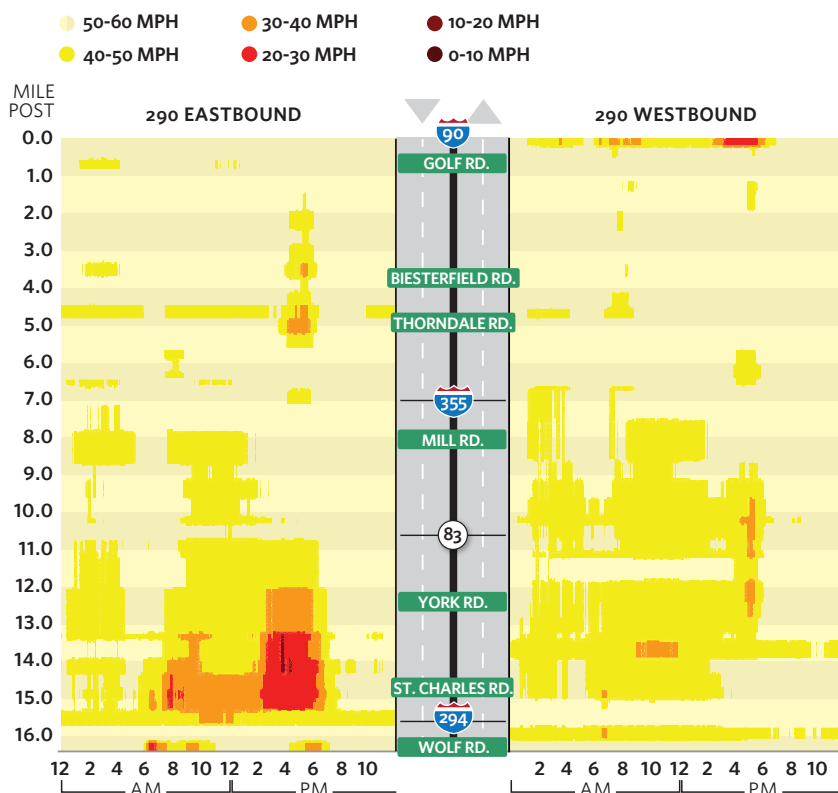
Regional agencies are the primary targets of the high-priority recommendations of GO TO 2040 concerning regional mobility. The following summarizes some important actions that these agencies can undertake.

## Transportation Finance

GO TO 2040 addresses both the need for more transportation revenue and the importance of making investment decisions based on thorough evaluation and setting of priorities. Regional agencies have central roles to play in both of these areas.

To help support GO TO 2040, regional agencies should focus their efforts on maintenance and modernization, and pursue only limited capital expansions. Reinvestment in existing infrastructure is shown to have higher economic returns than new construction, and also supports reinvestment in existing communities. A focus on maintenance would also help to reduce deferred maintenance, moving the region toward a “state of good repair.”

**I-290, Congestion Scan, 2007 Tuesday-Thursday**



The task of managing and reducing congestion begins with quality data. Data collected across the region through CMAP's Congestion Management Process (CMP) has been used to evaluate where our system has significant delays or bottlenecks and at what times of day. This data can then be used to determine where new projects should be prioritized and to assess what type of solution might work best. After completion of a project, congestion data can be used to assess whether the solution improved traffic flow or not. From CMAP Library

Note: Average speed is shown as a function of time of day (the horizontal x-axis) and location (the vertical y-axis).

Source: Analysis by Chicago Metropolitan Agency for Planning, based on data from Traffic.com.

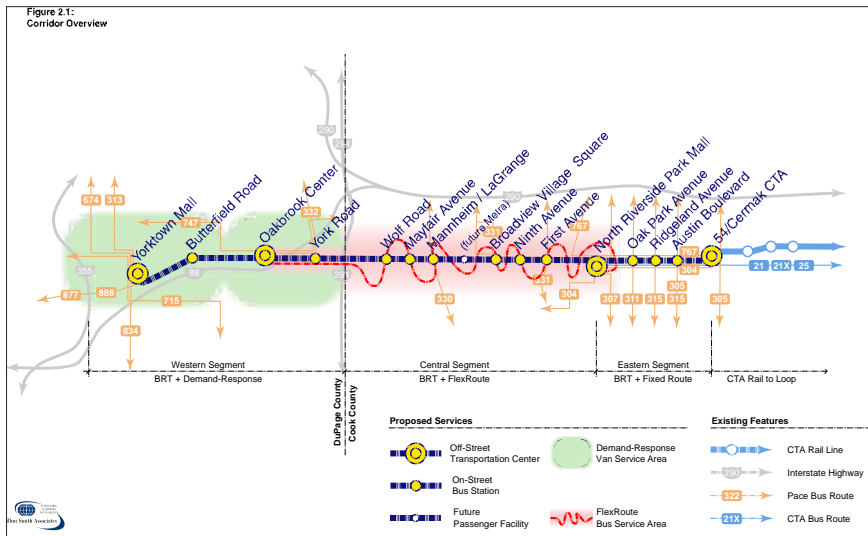


Prioritizing infrastructure investments for the greatest long-term gain is also a significant emphasis of this plan. Investments in transportation infrastructure should improve mobility and reduce congestion, but regional agencies can also give high priority to projects that improve job access and strengthen the economy, improve air quality and water quality, reduce greenhouse gas emissions, and strengthen overall public health, among other factors. Thorough evaluation is necessary to understand project impacts on these various factors, and regional agencies can work together with state, federal, and other agencies to improve transportation modeling and make it more comprehensive, allowing the use of transparent evaluation criteria for project selection.

Finding new funding sources for our transportation needs also requires a central role by regional agencies. GO TO 2040 recommends advancing congestion pricing projects and other managed lanes strategies, either through incorporating these features as part of capacity addition projects on expressways or converting existing lanes. Other finance options such as parking pricing, public-private partnerships (PPPs), or the use of value capture strategies around transit stations can all be explored at the regional level, though their application will ultimately be local. Due to limited potential for new transportation funding from the federal and state level, regional agencies will need to lead efforts to raise funds at the regional level to address our transportation needs. Regional agencies can conduct research, provide data, convene stakeholders to create consensus, and develop recommendations for action; implementation is often the responsibility of other groups.

## Major Capital Projects

GO TO 2040 recommends pursuing a limited number of major capital expansions on the expressway and transit system. Regional agencies have an important role to play in developing investment priorities, and also, in the case of the regional transit agencies, actually constructing and operating the identified projects. The construction of highway-based major capital projects are the responsibility of state implementers (IDOT and the Tollway), but the region can provide these agencies with recommendations to be considered in project design and implementation.



Arterial Bus Rapid Transit (BRT) is a cost-effective way of providing high quality transit service to under-served areas. Arterial BRT usually involves Transit Signal Priority (TSP) and queue jump by-pass lanes along arterial routes. TSP facilitates the movement of buses through traffic-signal controlled intersections. When a bus is behind schedule, a device on the bus sends a signal to upcoming intersections that automatically gives the bus priority by extending green lights, shortening reds, or providing queue jumps. This priority for transit helps to improve travel times along the route and ensure schedule reliability. Image courtesy of Pace

## Public Transit

GO TO 2040 makes a number of recommendations directly to the owners and operators of our region's transit system, including RTA, CTA, Metra, and Pace. These agencies can take active roles in seeking innovative financing ideas and prioritizing their own investments to maximize efficiency.

The region's transit agencies have a clear and primary role in improving transit operations. Operational improvements can include adopting new technologies to improve service and provide traveler information, making transfers between modes seamless, improving and expanding service, and many other improvements. See the plan's section on public transit for a much more extensive treatment of this issue.

## Freight

GO TO 2040 emphasizes the importance of freight infrastructure investments, policy changes, and other institutional issues, such as exploring the creation of a regional freight authority to finance needed infrastructure improvements and address community impacts. In CMAP's role as a convener of regional transportation stakeholders, it can take the lead in exploring issues such as this, including researching similar examples from around the nation, discussing organization options with affected groups, and identifying an appropriate host agency.

CMAP can also conduct research and analysis of freight data and convene transportation agencies and freight industry representatives. GO TO 2040 specifically recommends supporting the work of the Chicago Region Environmental and Transportation Efficiency Program (CREATE) partnership to implement it and plan for next steps; cataloging regional truck routes and exploring opportunities for dedicated truckways; and improving the region's ability to analyze freight data and incorporate freight priorities into regional investment decisions.



Riders of the CTA bus system have been very pleased with the CTA's recent Bus Tracker program. The web-based program uses GPS technology to give customers bus arrival times and service information for all stops along all bus routes. Users can access the information through the Internet, text messaging, or through popular cell phone applications that use the information provided by CTA. The popularity of the program is due to the simple concept of providing information to the customer. Image courtesy of CTAustracker.com

## Other actions that support regional mobility

GO TO 2040's recommendations are not a comprehensive list of the actions that can be taken by regional agencies to support regional mobility. A variety of other activities are regularly undertaken by CMAP to improve the region's transportation system. These include CMP, the use of intelligent transportation systems (ITS), proactive approaches to transportation safety and security, planning for non-motorized transportation, and ensuring system accessibility by all users. The following also discusses other practices that can be followed by all transportation implementers (state, regional, county, and local agencies) regarding managing the impacts of transportation investment.

## Congestion Management Process

First, the regional Congestion Management Process (CMP) can provide an ongoing opportunity to address transportation operational issues. This is a systematic approach to congestion that provides information on transportation system performance and on alternatives for alleviating congestion and enhancing mobility. To develop and implement the congestion management process and its component management and operations strategies, CMAP partners with government agencies at all levels, civic and advocacy groups, academic institutions, the planning and engineering communities, and other groups.

GO TO 2040 supports addressing the following strategies on an ongoing basis as part of the Congestion Management Process:

**Transportation Demand Management (TDM) reduces the demand for peak-period single-occupant vehicle travel by encouraging alternatives to traveling alone by auto, with emphasis on more efficient travel planning and private vehicle use. Specific TDM strategies include ridesharing programs, car-sharing, alternative work arrangements, parking management, guaranteed ride home programs, and transit and rideshare incentives.**

**Transportation System Management (TSM) is the application of construction, operational and institutional techniques to make the most productive and cost-effective use of existing transportation facilities and services. TSM can be applied through the retrofitting of existing facilities, and/or as part of new or reconstructed facilities. Strategies pursued through TSM include traffic operations center, traffic signal improvements, geometric improvements, time of day restrictions, ramp metering, commercial vehicle improvements, construction management, and roadside equipment and in-vehicle systems for cars. Upgrading transit vehicles and facilities is also a form of TSM.**

**Access management improves travel flow on arterials and collector roadways, and includes driveway management, median management, and frontage roads as specific strategies.**

**Incident management is also addressed through the CMP, and includes incident detection and verification, response, clearance, and providing information (including alternative routing).**

**The CMP can also involve roadway expansion for congestion relief, albeit in a targeted way.**

**Several of GO TO 2040's high-priority recommendations specifically cover items also considered to be part of the CMP. These include transit capital and operating improvements (covered in the public transit section) and congestion pricing and other managed lanes strategies (covered in the transportation finance section).**

**Two elements of the CMP — encouraging the use of non-motorized modes, and pursuing ITS — are described in following in further detail.**

### Non-motorized transportation

A good walking and bicycling environment is essential for our region. Barriers to pedestrians, bicyclists, and people with disabilities can discourage mobility, require expensive auto trips, or even prevent trips. GO TO 2040 supports improving conditions for non-motorized transportation. CMAP has played a central role in encouraging local, county, and state implementers to implement pedestrian and bicycle improvements, and these elements are addressed as critical elements of livable communities in GO TO 2040. The Soles and Spokes program is an important part of CMAP's ongoing operations and its continuation is also supported.

Seniors and the disabled face unique transportation challenges; GO TO 2040 supports the consideration of the needs of these groups in the course of providing regular transportation improvements and services. Transit agencies have established programs to comply with the Americans with Disabilities Act (ADA), which contributes greatly to improved transportation safety for all persons. Specific attention is given to accessibility and safety in the design of transit vehicles, stations, bus shelters, and other facilities; GO TO 2040 supports continued progress in this area. Continued operation of paratransit services to comply with and exceed the requirements of ADA is recommended, and improvements to fixed-route bus services are also recommended to encourage use of these assets by all riders.

## Intelligent Transportation Systems

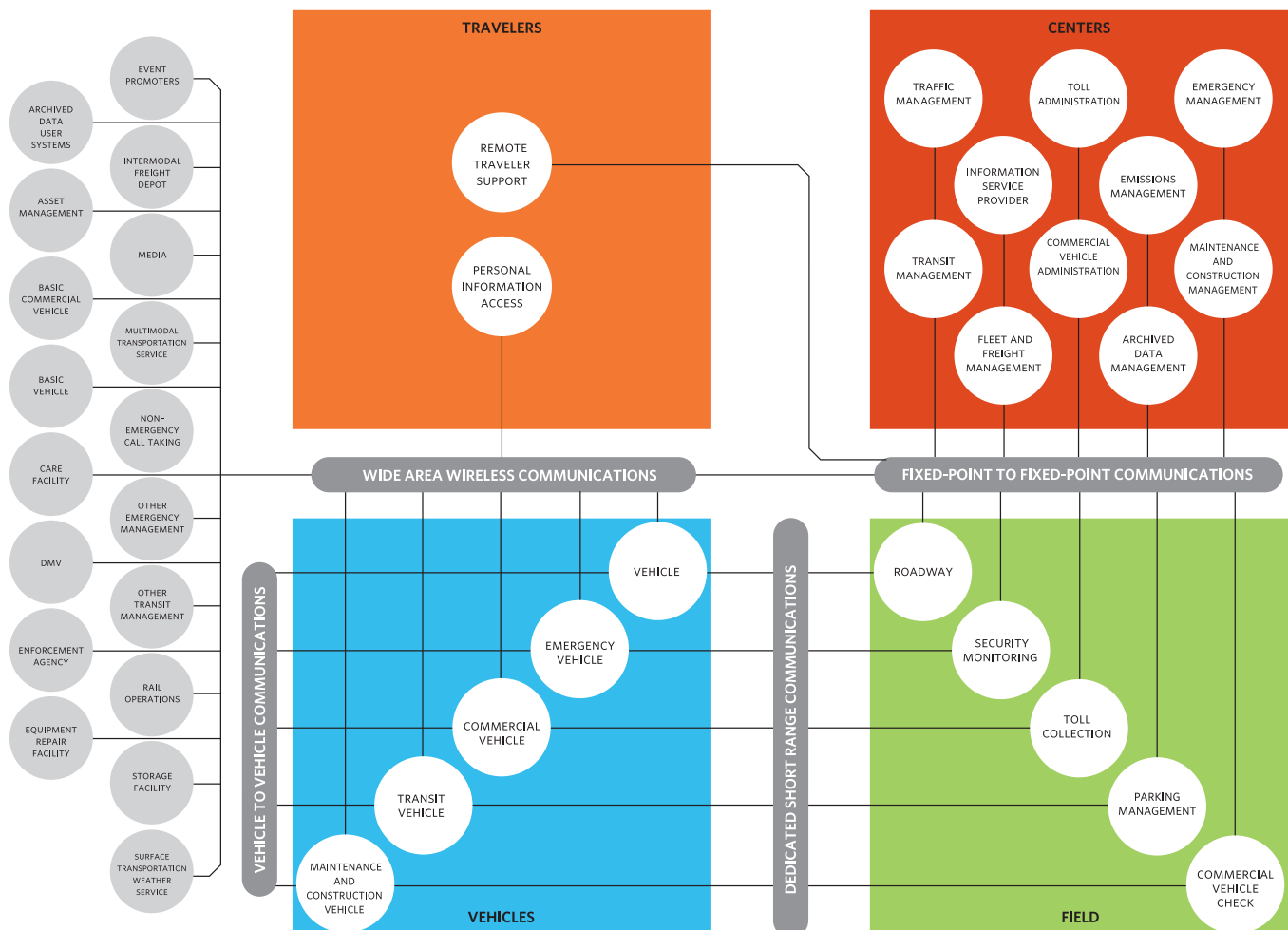
Intelligent transportation systems (ITS) includes advanced approaches to traffic management systems, traveler information systems, public transportation systems, commercial vehicle operations, and vehicle control systems. Specifically supported projects include a system of regional traffic management centers that will coordinate communication and operations for the transportation system; and a regional and multi-state communications system that provides real-time travel condition and emergency management information.

GO TO 2040 supports the ongoing development and implementation of the region's principal ITS blueprint, the *Strategic Early Deployment Plan for Northeastern Illinois* (SEDP). The SEDP includes the "ITS Architecture," a 15-year guide for transportation technology integration in northeastern Illinois. Each transportation project can be viewed as an element of the overall ITS architecture, providing visibility into the relationship between individual ITS projects and ways to cost-effectively build an integrated transportation system over time.

The regional ITS architecture also contains guidance on enhancing safety and security efforts. Discussions have included how ITS can help emergency responders communicate with transportation implementers to jointly improve system operations, particularly during emergencies.

A cooperative effort by the region's transportation agencies, covering all modes and roads in the region led to the creation of the Northeastern Illinois Regional ITS Architecture. This ITS Architecture essentially serves as a roadmap for integrating ITS throughout the seven-county region. The architecture represents a shared vision of how each agency's systems will work together in the future, sharing information and resources to provide a safer, more efficient, and more effective transportation system for travelers in the region. The architecture provides an overarching framework that spans planning agencies, operating agencies, and other organizations. Using the architecture, each transportation project can be viewed as an element of the overall ITS, providing visibility into the relationship between individual ITS projects and ways to cost-effectively build an integrated transportation system over time.

From CMAP Library



## Safety

GO TO 2040 identifies public safety as a crucial goal. This includes developing a transportation system that provides for safe travel by all modes. Promoting transportation safety is primarily focused on reducing injuries and loss of life associated with travel. Beyond this, implementing effective strategies to reduce crash risk and exposure will also reduce the economic losses and significant transportation system disruptions that result from crashes. Federal and state law significantly governs travel safety, including the design and operation of transportation facilities, vehicle design and operation, and behavior. In addition, safety is the subject of intense public education efforts.

The role of GO TO 2040 is to support ongoing efforts by all transportation system operators to improve safety; it does not make specific recommendations for changes in ongoing practices. Safety should be addressed by all transportation implementers — whether federal, state, regional, county, local, or others — as a regular part of transportation planning, programming, design, and implementation. All projects included or referenced in the plan should comply with current safety standards based on individual project studies.

GO TO 2040 acknowledges the Illinois Comprehensive Highway Safety Plan and transit agencies' System Safety Program Plans, and supports implementation of the strategies identified in these plans, as well as other strategies to improve safety. Significant strategies supported by GO TO 2040 include: developing safety information systems to facilitate better decisions; improving highway-rail crossing safety and the safety of large truck operations; increase intersection safety through a variety of enforcement and engineering strategies; and particular strategies targeted to vulnerable users of the transportation system. These include:

**General pedestrian and bicyclist safety. Roadway improvement funds should be devoted to improving pedestrian and bicyclist safety where necessary, and should include safe and inviting sidewalks, safe bicycle facilities, and crosswalks or traffic calming techniques. There are strong links between local planning and support for alternative transportation modes.**

**Programs to improve safety near schools, through Safe Routes to School (SRTS) projects or programs. The objective of these programs is to increase walking and biking to school among children, which has positive impacts on health and community livability.**

**Strategies to support safe travel for seniors and people with disabilities. Seniors and the disabled experience unique transportation challenges, and are likely to make transportation decisions based on perceptions of safety. It is important to create a safe and secure system to allow their travel — particularly through improvements to pedestrian facilities and the transit system.**

## Security

The security of the region's transportation system is another important goal of GO TO 2040. The plan supports coordinated responses now under way to address identified security threats and to overall increase emergency preparedness, including the overarching goals in the "Illinois State Transportation Plan," the continued work of the Illinois Terrorism Task Force, and specific security planning by transit agencies. In addition, GO TO 2040 acknowledges that additional work has taken place and will take place to address security by transportation providers and public safety offices of governments at all levels, but that much of this work must not be documented publicly.

GO TO 2040 supports efforts to deploy ITS infrastructure to facilitate security by deterring, detecting, and responding to specific security threats, and by providing information to decision-makers and response personnel. It also supports the design and construction of transportation facilities to accommodate security needs, including the availability of multiple routes and modes. GO TO 2040 promotes strategies to coordinate incident response to minimize casualties and disruption, including evacuation procedures that assure the evacuation of vulnerable users, and communications plans that assure that coordinated actions are taken by the public and response personnel.

## Managing the Impacts of Transportation Investment

The region also has a role in encouraging transportation implementers to consider the broad impacts that their decisions and investments have beyond transportation improvements. In general, GO TO 2040 supports the use of Context Sensitive Solutions (CSS) principles — which include involving stakeholders in the decision-making process, using the flexibility inherent in transportation design standards, and balancing the many competing interests — in the design and implementation of transportation projects. GO TO 2040 particularly supports efforts by transportation implementers to consider the community, economic development, public health, and environmental impacts of projects.

Community and economic development impacts can be addressed through using CSS principles to develop solutions that promote local community quality, individuality, and economic development. GO TO 2040 recommends coordinating transportation improvements with the land use, community development, or economic development plans developed by local governments. It is particularly important to resolve the interaction of transportation projects with official historical, cultural, and agricultural preservation plans, as part of the federal project development process.

GO TO 2040 further recommends that project implementers prioritize environmental stewardship as part of their transportation investments, and supports thorough investigations of environmental concerns during project development and design phases to avoid, minimize, and mitigate effects. Environmental issues that should be considered include, but are not limited to, water quality and supply, stormwater, open space preservation, biodiversity, wetlands, and agriculture; transportation implementers should also consult with state, regional, local, and other plans regarding the natural environment. Also, implementers should be aware of flood risks when planning and designing infrastructure; flooding in our region is expected to increase in the future due to the impacts of climate change, which may require different design approaches or avoidance of floodplains altogether.

Much of the environmental impact of transportation is governed by national, state, and local environmental protection regulations; one specific regional role includes demonstrating that GO TO 2040 meets air quality standards (described further in the Appendices). The environmental impacts of the major transportation capital projects recommended in GO TO 2040 are addressed in the transportation finance section.